

WHAT IS CLAIMED IS:

1. A method for separating a mask from the surface of a semiconductor wafer when configured as a mask/wafer combination, comprising the steps of:
5 mounting the mask/wafer combination on a rotatable surface;
rotating the rotatable surface;
inserting a separating device at the edge of the mask between the two mating surfaces of the mask and the semiconductor wafer; and
10 urging the separating device toward the rotating center of the mask/wafer combination while the rotatable surface is rotating.
2. The method of Claim 1, wherein the surface of the semiconductor wafer diametrically opposite the mask is disposed proximate to the surface of the rotatable surface.
3. The method of Claim 2, further comprising the step of moving the rotatable surface away from the separating device with the semiconductor wafer attached thereto.
4. The method of Claim 3, wherein the step of moving the rotatable surface comprises the moving the rotatable surface as a function of the movement of the separator device toward the rotating center of the mask/wafer combination.
5. The method of Claim 1, wherein the mask comprises a metal mask.
6. The method of Claim 5, wherein the metal mask comprises a shadow mask.
7. The method of Claim 1, wherein the separating device comprises a wedge shaped device.
8. The method of Claim 1, further comprising the step of programming the rotational speed of the rotatable surface.

9. The method of Claim 1, wherein the mask/wafer combination is held onto the rotatable surface by a vacuum.

10. The method of Claim 1, and further comprising the step of urging the surface of the mask/wafer combination downward as the separating device is moved toward the rotating center of the mask/wafer combination while the rotatable surface is rotating.

11. A shadow mask removal system for separating a mask from the surface of a semiconductor wafer when configured as a mask/wafer combination, comprising:

a rotatable surface for receiving in a mounting relationship the mask/wafer combination;

a rotation apparatus for rotating the rotatable surface;

5 a separating device operable to be inserted at the edge of the mask between the two mating surfaces of the mask and the semiconductor wafer; and

a motive device for urging the separating device toward the rotating center of the mask/wafer combination while the rotatable surface is rotating.

12. The shadow mask removal system of Claim 11, wherein the surface of the semiconductor wafer diametrically opposite the mask is disposed proximate to the surface of the rotatable surface.

13. The shadow mask removal system of Claim 12, wherein the motive device is operable to move the rotatable surface away from the separating device with the semiconductor wafer attached thereto.

14. The shadow mask removal system of Claim 13, wherein the motive device is operable to move the rotatable surface as a function of the movement of the separator device toward the rotating center of the mask/wafer combination.

15. The shadow mask removal system of Claim 11, wherein the mask comprises a metal mask.

16. The shadow mask removal system of Claim 15, wherein the metal mask comprises a shadow mask.

17. The shadow mask removal system of Claim 11, wherein the separating device comprises a wedge shaped device.

18. The shadow mask removal system of Claim 11, further comprising a program device for programming the rotational speed of the rotatable surface.

19. The shadow mask removal system of Claim 11, wherein the mask/wafer combination is held onto the rotatable surface by a vacuum device.

20. The shadow mask removal system of Claim 11, and further comprising a vertical motive device for urging the surface of the mask/wafer combination downward as the separating device is moved toward the rotating center of the mask/wafer combination while the rotatable surface is rotating.